



The Macrogram

Hartford Chapter of the ASM International
Build on our Strengths - Leverage our Diversity - Network to Succeed

MONTHLY MEETING – TOPIC

February 12, 2007 (Monday) - Trustee Night

**Topic: Laboratory Experiment Capabilities Aboard
The International Space Station**

Speaker: Dr. Daniel P. Dennies, FASM
Associate Technical Fellow
Boeing Company
2006-2009 Trustee ASM International

Directions: La Notte Restaurant, 17 Thompson Road, East Windsor, CT 06088, Ph: 860-727-7774
I-91 Exit 44, turn right at end of exit, Thompson Road is the second left.

Agenda:

Cocktails: 5:30-6:30 PM
Dinner: 6:30-7:30 PM
Program: 7:30-8:30 PM

Program Charges:

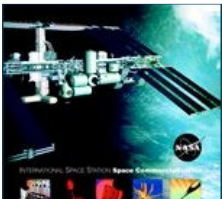
Regular Members - \$28.00
Retirees - \$15.00
Full Time Students - \$15.00

Technical Chairperson: John Rugh

Reservations: Call Shirley at Dynamic Metals
(860) 583-3336 by noon Thursday, February 8th.

Thanks!

Abstract:



Assembly of the International Space Station (ISS) sprang to life in 2000 with multiple launches of the United States Space Shuttle fleet and Russian launch vehicles. This activity included the arrival of

the first crew, Expedition One, on 2 November 2000. One goal of ISS is a permanently orbiting laboratory in space with capabilities that cannot be duplicated on Earth. Experiments will be conducted in many areas including life sciences, space sciences, Earth sciences, space product development, engineering research and technology, and microgravity science. These experiments will be conducted in, or outside of, one of the ISS laboratories. These laboratories include the U.S. Laboratory Destiny, the European Space Agency (ESA) Columbus Laboratory, the Japanese Experiment Module, the Centrifuge Accommodation Module, and two Russian Research Modules.

Bio:

Dr. Daniel P. Dennies is an Associate Technical Fellow for the Boeing Company and has 27 years experience as a metallurgist and performing failure investigations. He authored the book "How to Organize and Run a Failure Investigation," released in September 2005. The majority of his career has been in the aerospace industry working on projects such as the Space Shuttle



Main Engine, the National Launch System, the National Aerospace Plane, expendable launch systems like Delta and Titan and, most recently, the International Space Station.

He has accumulated a large amount of experience with a wide variety of materials, processes and test mechanisms through his association with the design and manufacturing aspects of these programs. Dr. Dennies broadened his manufacturing experience and industrial knowledge by working in the forging industry and the raw material industry.

He has been a member of ASMI for 29 years and is a 2002 ASM Fellow. He is also the recipient of the 2004 Allan Ray Putman Award from ASMI. Dan received the 2005 Orange County Engineering Council Prestigious Engineering Achievement Award. He is also a 1999 honoree of the coveted NASA Silver Snoopy Award.

He was a founding Materials Mentor for the Eisenman Materials Camp in 2000 and has attended a Materials Camp as a Materials Mentor each year since. He is the coordinator of the Teachers Materials Camp in LA. Dan is active on the local level as member of the LA Chapter executive board. He is also active on the national level as a Trustee for both the ASMI Education Foundation and the Society itself. Dan is also on various national committees.



The Danforth Tavern Mug, given to speakers at Hartford Chapter meetings, has a custom ASM Hartford Chapter logo and was cast by Woodbury Pewterers.

www.asm-hartford.org/SpeakerGift.htm



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MONTHLY MEETING – TOPIC

March 20, 2007

Topic: Connecticut is Fertile Ground for the Biofuels Revolution

Speaker: Dr. Richard Parnas
Associate Professor
Director of Chemical Engineering
Chemical, Materials and Biomolecular Engineering
University of Connecticut

Directions: Zenny's Restaurant, 625 Middle Turnpike (Route 44), Storrs/Mansfield, CT 06268
Ph: 860-429-7510
On Route 44 at the intersection of Routes 195 and 44.

Agenda:

Cocktails: 5:30-6:30 PM
Dinner: 6:30-7:30 PM
Program: 7:30-8:30 PM

Program Charges:

Regular Members - \$28.00
Retirees - \$15.00
Full Time Students - \$15.00
CMBE Students - \$10.00

Technical Chairperson: Mark Aindow

Reservations: Call Shirley at Dynamic Metals (860) 583-3336 by noon, March 15th. **Thanks!**

Abstract:



Imagine an agriculturally based energy industry in Connecticut. The increasing cost and geopolitical uncertainty of petroleum is driving changes in world energy markets. Many states are beginning to invest in new, homegrown energy alternatives, such as biofuels.

Connecticut has been active through several legislative and executive branch task forces. But it's imperative that we make the investment and act now. If we fail to act, the jobs will go to other states and we will miss an opportunity to establish our own measure of energy freedom right in our backyard.

The University of Connecticut Biofuels Consortium produces 50 gallons of biodiesel a week from restaurant waste oil for use in UConn vehicles. We estimate that 15 percent of the

state's imported petroleum fuels could be displaced if 10 percent of Connecticut's land were devoted to the cultivation of energy crops, and those crops were converted to fuels such as ethanol and biodiesel.

That is with existing technology. We estimate that the displacement of petroleum could surpass 25 percent on the same amount of land as new agricultural technologies are developed in the next decade.

Acting on this opportunity would enable us to preserve open spaces, generate jobs, reduce respiratory illness, bolster our farming sector, reduce global warming and contribute to geopolitical stability. Connecticut can do more than simply imagine it. We have a once-in-a-lifetime chance to start something new, important and beneficial in the state.

Bio:



Dr. Richard Parnas is an Associate Professor and Director of Chemical Engineering at the University of Connecticut and the head of the university's biofuels program. He has the following degrees in

Chemical Engineering: Ph.D. UCLA, M.S. UCLA, B.S. MIT. His research interests include: In-situ Membrane Diagnostics for Fuel Cells, Flow in Porous Media, New Feedstocks for the Commodity Plastics Market and Biofuels.

ASM Hartford recognizes that the Department of Chemical, Materials & Biomolecular Engineering will generate significant opportunities for cross-cutting research in many exciting areas, particularly in nanomaterials including biomaterials and nanoscale processes in biomaterials. Key to this process will be synergy forged by strong relationships with industry among the interdisciplinary fields under this new umbrella.

This is the inaugural meeting in what we hope will be an annual presentation on a topic both of interest to and helpful in building relationships among those in these disciplines.

EXEC'S LETTER



I'd like to thank Lt. Col. John Lawlor again for his excellent presentation about managing infrastructure rebuilding projects in Iraq. This behind the scenes look at the state of the Iraqi power generation and water treatment facilities showed us just how neglected

these vital services have been over the past few decades. Hearing what it takes to actually accomplish a project in Iraq using local labor and supervisors was quite a lesson in conducting business in a third world country.

In February we have another fascinating presentation scheduled. Dr. Daniel Dennies from Boeing will be discussing the experimental capabilities aboard the International Space Station. Anyone interested in space exploration, and the frontiers of basic materials and life sciences should find this talk interesting. This meeting will be held at La Notte, conveniently located just off I-91 in East Windsor. Please sign up early because seats are limited.

The development of renewable fuel sources is a hot topic these days. It may seem like more of a topic of interest in the Midwest, but work is going on here in Connecticut to develop new sources of biofuels. In March join us to learn about these "homegrown" efforts to reduce our dependence on imported energy sources.

I look forward to seeing you at our upcoming meetings.

Thanks for your Support,

John Rugh

PETER FOULLON, 1983-4 Chairman passed away on December 4, 2006 after a courageous battle with cancer.

Pete was a metallurgical engineer with a Master's in business. He excelled in operational management and had the opportunity to travel extensively around the world. He loved music of all generations and took great joy in his family and friends. He also was an avid car enthusiast and an ACC basketball fan. He was the Chairman of the Hartford Chapter of the American Society of Metals from 1983-4.



Check www.asm-soct.org for ASM Southern Connecticut Chapter on meeting planned for the February 15 - Connie's Family Restaurant, 87 Elizabeth Street, Derby, CT.

Opportunities For Porous Metal In Medical Applications
Social hour at 5:30 PM, dinner at 6:30 PM and talk at 7:30 PM



Coffee Talk Speaker Gift

Coffee Talks

We encourage our Chapter Sustaining Members to briefly (8-12 minutes) tell our members about their products and services in a *Coffee Talk*.

Coffee Talks are given at ASM Hartford monthly meetings when appetizers are served, typically just after the networking hour (5:30-6:30 PM) and prior to dinner (6:45 PM).

Contact our Chapter Chairperson to give a Coffee Talk.

If you are not a Chapter Sustaining Member and wish to give a Coffee Talk, you can either sponsor one of our meetings or become a Chapter Sustaining Member by contacting our Chapter Secretary or Chairperson.

The faculty of the Materials Science and Engineering Program at UConn are seeking the support and collaboration of materials intensive companies who are substantial employers of Materials Science and Engineering graduates to assist them in providing the margin of excellence in their undergraduate degree program. They want your support and collaboration in sponsoring a project for the two-semester senior capstone design project course, MMAT 287 and MMAT 288W. There are unique benefits for your company.

For more details go to:

www.asm-hartford.org/meetings/SeniorProjectBrochure.pdf

Contact: Mark Aindow,
Director, Materials Science and Engineering Program
Department of Chemical, Materials and Biomolecular Engineering, Unit 3222
University of Connecticut, Storrs, CT 06269
Tel: +1 (860) 486-2644
Email: m.aindow@uconn.edu

Annual Golf Outing Classic
September 12, 2007
At Gillette Ridge CC
Bloomfield, CT



All proceeds go to our Scholarship and Student Outreach Programs

Mid Winter 2007

ASM HARTFORD

2006-2007 Executive Committee

Chairperson	John Rugh	(860) 346-2433
Secretary	Jack Woodilla	(203) 374-7650
Treasurer	Sam Christy	(860) 565-5985
Public Relations	Harley Graime	(860) 550-7246
Scholarship	Rob McQueeney	(860) 738-5650
Membership	Jack Piela	(860) 872-9359
University Affairs	Mark Aindow	(860) 486-2644
Student Affairs	Rainer Hebert	(860) 486-3155
Student Chapter	Amber Black	(860) 427-4744
Golf Outing	Rebecca Gatzon	(860) 667-4403
Member at Large	Stu Weiss	(860) 731-6736
Member at Large	Joe Kubinski	(860) 745-5977
Outgoing Chair	Arnie Grot	(860) 633-5849

Due to cost of printing and mailing, ASM Hartford will publish just one issue of the Macrogram in the fall, one winter issue and one spring issue. Therefore, it is particular important that you bookmark the ASM Hartford web site (<http://www.asm-hartford.org/>) and check it regularly for updated information. We will continue to send out email notices to those on our distribution list prior to events.

To receive an email notice of Hartford Chapter events, send an email to web@asm-hartford.org.



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Hartford Chapter

The Materials Information Society

www.asm-hartford.org

ASM HARTFORD CHAPTER
Jack Piela, Membership
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Vernon, CT 06066